ACRA

Methodology for Credit Ratings Assignment to Regional and Municipal Authorities of the Russian Federation

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Contents

1 Scope of Methodology

The Methodology for Assigning Credit Ratings to Regional and Municipal Authorities is used for assessing creditworthiness and assigning credit ratings to individual authorities (Rated entities) within subjects of the Russian Federation and municipalities of the Russian Federation.

The main criteria for application of this Methodology is the right and ability of the rated entity to form and implement its own budget and regulate budget relations on its territory based on power delineation with higher authorities.

This Methodology shall be applied on a permanent basis until an approval of its new version by the Methodological Committee of ACRA.

Revisions of credit ratings assigned according to this Methodology shall be made subject to the requirements of the Federal Law of 13 July 2015 No 222-FZ "On the Activities of credit rating Agencies in the Russian Federation, On the amendment to Article 76.1 of the Federal Law 'On the Central Bank of the Russian Federation (Bank of Russia)' and the invalidation of certain provisions of legal acts of the Russian Federation" and in compliance with ACRA internal documents, but not later than 182 days after the date of the latest rating action.

In order to keep the Methodology up to date, ACRA shall review and amend this Methodology on the following grounds:

- Deviations from this Methodology more than three times per quarter in the course of rating actions;
- Revisions prescribed by methodology monitoring conducted by the Methodological Group;
- Discoveries of incompliance with the requirements of the Federal Law of 13 July 2015 No 222-FZ "On the Activities of credit rating Agencies in the Russian Federation, On the amendment to Article 76.1 of the Federal Law 'On the Central Bank of the Russian Federation (Bank of Russia)' and the invalidation of certain provisions of legal acts of the Russian Federation;"
- Requests for immediate revisions of the Methodology by the ACRA Compliance and Internal Control Service.

No later than one calendar year after the date of the latest revision of this Methodology, ACRA shall review it in accordance with its internal documents. As a result, the Methodology may be amended or remain unchanged.

In the course of implementing this Methodology, every case of deviation from it shall be duly documented and disclosed on the ACRA official website www.acra-ratings.ru when a credit rating or its outlook is published, with indication of reasons for such deviation.

If and when any errors are detected in this Methodology that have affected or may affect credit ratings and/or their outlooks, ACRA shall conduct an analysis and review of this Methodology in accordance with its internal procedures. Information about such actions and the new version of the Methodology shall be filed with the Bank of Russia as required by the latter. If the errors discovered in the Methodology impact any previously assigned credit ratings, ACRA shall disclose this information on its official website www.acra-ratings.ru.

If the slated changes to the Methodology are significant and impact or may impact current credit ratings, ACRA shall:

1) Submit to the Bank of Russia and post on its official website www.acra-ratings.ru the information about the slated changes indicating reasons for and consequences of such changes, including those that affect credit ratings assigned according to this Methodology;
2) Assess the need for revising credit ratings assigned in accordance with this Methodology within six months after the Methodology revision date;
3) Revise all credit ratings that require changes within six months after the Methodology revision date.

2 Information Sources Used in Assigning Credit Ratings

In its research activities, ACRA relies on both the information provided by the rated entity and information obtained from other sources. The main sources of information used by ACRA for carrying out rating analysis are listed below:

1. Information sources for evaluating budget performance:
   - 1.1. Budget execution reports by the rated entity spanning the past three years.
   - 1.2. The adopted budget of the rated entity for the current year and any approved amendments to it.
   - 1.3. The budget forecast of the rated entity for the following year.
   - 1.4. Interim reports up until the most recent available date.
2. Information sources used for analyzing financial debt of the rated entity:
   - 2.1. Extract from the debt book for the past three years and extract relevant to the latest available date.
   - 2.2. Debt repayment schedule as of the latest available date.
3. Information sources showing the state of the economy, industries, and companies in the region, as well as social indicators of the rated entity:
   - 3.1. Statistical reports prepared by official accounting and statistics agencies.
   - 3.2. Informational and analytical materials prepared by departments (ministries) of socioeconomic development, finance and other relevant bodies.
   - 3.3. Financial statements of government sector enterprises.
   - 3.4. Public sources.
   - 3.5. Macroeconomic and sector forecasts prepared internally by ACRA.
4. Information obtained during a rating meeting or upon request by the Agency.

5. Contractual documentation pertaining to loan agreements.
6. Issuance documentation pertaining to securities issues.
7. ACRA questionnaires filled out by the rated entity.
8. Other available information.

In the course of rating analysis, ACRA uses the latest publicly available data. Given that some official data are published with a certain time lag, analysis may also be based on internal estimates of relevant bodies and forecasts made by ACRA internal business units.

In case information is insufficient for proper Methodology application, ACRA shall not assign a credit rating. In case information is insufficient for supporting a current credit rating, ACRA shall withdraw this credit rating, but shall take no other steps with relation to it. All such actions shall be reflected in a rating action publication pertaining to the rated entity.

Information sufficiency is determined by the possibility of conducting a rating analysis in accordance with ACRA's general principles of the rating process[1]. The main information sufficiency criteria are listed below:

- Possibility of quantitative and qualitative analyses of financial and economic activities of a rated entity;
- Possibility of analyzing any internal and external risk factors that may affect the rated entity's creditworthiness;
- Possibility of comparative analysis of the rated entity with its peer group.

3 Basic Methodology Principles and Credit Rating Assignment Procedure

Creditworthiness analysis of and credit rating assignment to regional or municipal authorities are carried out depending on the rated entity's ability to ensure timely servicing and repayment of its financial liabilities, which in turn is based on its institutional parameters, economic base, ability to control budget revenues and expenditures, and funding sources.

Given that debt repayment and servicing obligations are set forth in the legal budget act of the rated entity for the period in question, an intentional evasion by the rated entity from debt repayment or servicing is in fact a breach of the law. When conducting its analysis, the Agency assumes that the rated entity strictly complies with all legal regulations, and in view of this does not consider the possibility of intentional evasion from executing debt obligations by rated entities as a rating factor.

In the course of rating factor evaluation and credit rating assignment, the Agency assumes that all information provided to it is correct and does not contain any deliberate distortions. When conducting rating analysis, the Agency reserves the right to interpret the provided information

[1] Please refer to "Rating Actions Procedures and General Principles of the Rating Process of the Analytical credit rating Agency (Joint-Stock Company)."

in accordance with its own assessment of the rated entity's socioeconomic development and its budget parameters.

The creditworthiness level of a regional or municipal authority is determined on the long-term basis. Cyclical economic fluctuations (phases of industry cycles) and political events (government elections) are assessed in terms of their long-term impact on the creditworthiness of the rated entity, regardless of the current political or economic environment.

Credit rating assignment hinges on the assessment of the following factors:

- Institutional factor;
- Regional economy;
- Budget structure and budget discipline;
- Debt load;
- Liquidity.

Institutionally, the functioning of a regional or municipal authority is based on the applicable legislation, the evaluation of which allows to gauge the region's ability to form budget income sources and decide on expenditure allocation.

The basic principle for determining creditworthiness (ability to service and repay debt) of a regional or municipal authority is the parity between its economic base that forms its budget revenue sources, and expenditure powers coupled with a need to finance them via debt instruments. Here and below, revenues and expenditures of a sub-federal or municipal authority shall be treated as budget indicators of the rated entity alone, without taking into account any lower-level budgets.

The basic parameter for assessing creditworthiness of the rated entity (in this case, a regional government body) are the levels of development and diversification of the regional economy. The regional economy and social services serve as its budget revenue sources and determine its spending allocation.

Sustainable economic development is a necessary but insufficient condition for a regional government body to have high creditworthiness. In addition to the state of the regional economy, which provides revenue flows for the regional or municipal budgets, the Methodology also takes into account the regional government's ability to ensure a proper fiscal discipline (control and efficiency of budget expenditures) and stimulate regional economic development as a source of future tax revenues.

When gauging the size of debt load in the rated entity's budget, The Agency analyzes not only the quantitative balance between budget revenues and volume of debt repayment and servicing, but also the purposes of long-term debt financing, as well as the efficiency of borrowed funds use. Special focus is placed on debt financing of capital expenditures and development projects.

The liquidity factor is assessed from the standpoint of the rated entity's ability to effectively manage cash flows and thus ensure availability of funds for timely debt servicing and repayment.

When assigning credit rating to a region, the Agency evaluates each of the five above-listed factors with regards to it in the range from 0 to 1.

Table 1. Credit rating factors

Factors	Weight	Assessment	Credit rating criteria
• Institutional factor	5%	0% to 100%	• Institutional environment stability • Budget process predictability
• Regional economy	30%	0% to 100%	• Economic development dynamics • Tax base development level • Population's well-being • Social services development level • Economic diversification level
• Budget structure and budget discipline	30%	0% to 100%	• Share of own revenues in the budget • Mandatory budget expenditure level • Operating balance • Capital expenditure level
• Debt load	20%	0% to 100%	• Debt portfolio parameters • Debt servicing and repayment sources • Borrowing objectives • Credit history • Debt of state-owned enterprises
• Liquidity	15%	0% to 100%	• Budget liquidity characteristics • Access to short-term financing

Source: ACRA

Based on the weight of each credit rating factor, the Agency calculates the corresponding range of the credit rating estimate.

Each range corresponds to a specific rating category. A final assessment of the rated entity's credit rating takes into account the specifics of its economy, social services, budgetary component, and any other parameters that may influence its creditworthiness.

Table 2. Credit rating matrix*

Credit rating assessment range	Institutional factor	Regional economy	Budget structure and budget discipline	Debt load	Liquidity	Credit rating category
100-85%	**Expert-assessed:** • Stable and predictable institutional environment • Well-defined budgetary functions and powers	• GRP per capita exceeds country average by more than 20% • Unemployment falls short of country average by more than 20% • Private income exceeds country average by 30% or more • Share of one sector/one company in GRP does not exceed 15% • Share of largest taxpayer does not exceed 15% • Share of largest sectors/companies in total employment does not exceed 15% **Expert-assessed:** • Social factors	• Own budget revenues exceed 80% of total revenues • Mandatory budget expenditures do not exceed 55% of total expenditures • The operating balance to regular income ratio exceeds 35% • Capital expenditures exceed 21% of total expenditures	• Debt does not exceed 50% of operating balance • Operating balance net of interest expenses equals at least 300% of annual debt repayment • Servicing costs do not exceed 10% of operating balance **Expert-assessed:** • Credit history • Debt redemption schedule of rated entity • Debt portfolio dynamics and structure	Excessive	AAA
85-75%	**Expert-assessed:** • Stable and predictable institutional environment • Well-defined budgetary functions and powers	• GRP per capita exceeds country average by more than 10% • Unemployment falls short of country average by 10-20% • Private income exceeds country average by 20% or more • Share of one sector/one company in GRP equals 15-20% • Share of largest taxpayer equals 15-20% • Share of largest sectors/companies in total employment equals 15-20% **Expert-assessed:** • Social factors	• Own budget revenues exceed 70% of total revenues • Mandatory budget expenditures equal 55-60% of total expenditures • The operating balance to regular income ratio equals 30-35% • Capital expenditures equal 18-20% of total expenditures	• Debt equals 50-100% of operating balance • Operating balance net of interest expenses equals 300-270% of annual debt repayment • Debt servicing costs equal 11-20% of operating balance **Expert-assessed:** • Credit history • Debt repayment schedule of rated entity • Debt portfolio dynamics and structure	High	AA
75-65%	**Expert-assessed:** • Relatively stable and predictable institutional environment • Isolated cases of budgetary function and power revisions	• GRP per capita exceeds country average by 3-10% • Unemployment exceeds country average by 5-10% • Private income exceeds country average by 10% or more • Share of one sector/one company in GRP equals 20-25% • Share of largest taxpayer equals 20-25% • Share of largest sectors/companies in total employment equals 20-25% **Expert-assessed:** • Social factors	• Own budget revenues exceed 60% of total revenues • Mandatory budget expenditures equal 60-65% of total expenditures • The operating balance to regular income ratio equals 25-30% • Capital expenditures equal 15-17% of total budget expenditures	• Debt equals 100-160% of operating balance • Operating balance net of interest expenses equals 270-240% of annual debt repayment • Debt servicing costs equal 21-30% of operating balance **Expert-assessed:** • Credit history • Debt repayment schedule of rated entity • Debt portfolio dynamics and structure	High	A
65-55%	**Expert-assessed:** • Relatively stable and predictable institutional environment • Periodic revisions of budgetary functions and powers	• GRP per capita equals at least 95% of country average • Unemployment falls short of country average by 1-5% • Private income equals country average or exceeds it by no more than 10% • Share of one sector/one company in GRP equals 25-30% • Share of largest taxpayer equals 25-30% • Share of largest sectors/companies in total employment equals 25-30% **Expert-assessed:** • Social factors	• Own budget revenues equal 50-60% of total revenues • Mandatory budget expenditures equal 65-70% of total expenditures • The operating balance to regular income ratio equals 20-25% • Capital expenditures equal 12-14% of total budget expenditures	• Debt equals 160-220% of operating balance • Operating balance net of interest expenses equals 240-210% of annual debt repayment • Debt servicing costs equal 31-50% of operating balance **Expert-assessed:** • Credit history • Debt repayment schedule of rated entity • Debt portfolio dynamics and structure	Sufficient	BBB

Credit rating assessment range	Institutional factor	Regional economy	Budget structure and discipline	Debt load	Liquidity	Credit rating category
55-45%	**Expert-assessed:** • Relatively stable and predictable institutional environment • Periodic revisions of budgetary functions and powers	• GRP per capita equals at least 80% of country average • Unemployment exceeds country average by no more than 5% • Private income falls short if country average by no more than 10% Share of one sector/one company in GRP equals 30-35% • Share of largest taxpayer equals 30-35% • Share of largest sectors/companies in total employment equals 30-35% **Expert-assessed:** • Social factors	• Own budget revenues equal 40-50% of total revenues • Mandatory budget expenditures equal 70-75% of total expenditures • The operating balance to regular income ratio equals 15-20% • Capital expenditures equal 9-11% of total budget expenditures	• Debt equals 220-280% of operating balance • Operating balance net of interest expenses equals 210-160% of annual debt repayment • Debt servicing costs equal 51-70% of operating balance. **Expert-assessed:** • Credit history • Debt repayment schedule of rated entity • Debt portfolio dynamics and structure	Sufficient	BB
45-35%	**Expert-assessed:** • Unstable and hard-to-predict institutional environment • Regular revisions of budgetary functions and powers	• GRP per capita equals at least 70% of country average • Unemployment falls short of country average by no more than 10% • Private income falls short of country average by no more than 20% • Share of one sector/one company in GRP equals 35-40% • Share of largest taxpayer equals 35-40% • Share of largest sectors/companies in total employment equals 35-40% **Expert-assessed:** • Social factors	• Own budget revenues equal 30-40% of total revenues • Mandatory budget expenditures equal 75-80% of total expenditures • The operating balance to regular income ratio equals 10-15% • Capital expenditures equal 6-8% of total budget expenditures	• Debt equals 280-340% of operating balance • Operating balance net of interest expenses equals 160-110% of annual debt repayment • Debt servicing costs equal 71-90% of operating balance. **Expert-assessed:** • Credit history • Debt repayment schedule of rated entity • Debt portfolio dynamics and structure	Deficit	B
35-30%	**Expert-assessed:** • Unstable and unpredictable institutional environment • Frequent revisions of budgetary functions and powers	• GRP per capita equals at least 55% of country average • Unemployment exceeds country average by no more than 20% • Private income falls short of country average by no more than 40% • Share of one sector/one company in GRP exceeds 40% • Share of largest taxpayer exceeds 40% • Share of largest sectors/companies in total employment exceeds 40% **Expert-assessed:** • Social factors	• Own budget revenues are less than 30% of total revenues • Mandatory budget expenditures equal 80-85% of total expenditures • The operating balance to regular income ratio equals 5-10% • Capital expenditures equal 3-5% of total budget expenditures	• Debt equals 340-400% of operating balance • Operating balance net of interest expenses equals 110-80% of annual debt repayment • Debt servicing costs equal 91-110% of operating balance. **Expert-assessed:** • Credit history • Debt repayment schedule of rated entity • Debt portfolio dynamics and structure	Critical	CCC
Under 30%	**Expert-assessed:** • Unstable and unpredictable institutional environment • Budget functions and powers are revised frequently	• GRP per capita is less than 55% of country average • Unemployment exceeds country average by more than 20% • Private income falls short of country average by 40% or more • Share of one sector/one company in GRP exceeds 50% • Share of largest taxpayer exceeds 50% • Share of largest sectors/companies in total employment exceeds 50% **Expert-assessed:** • Social factors	• Own budget revenues are less than 20% of total revenues • Mandatory budget expenditures exceed 85% of total expenditures • The operating balance to regular income ratio is less than 5% • Capital expenditures do not exceed 3% of total budget expenditures	• Debt exceeds 400% of operating balance, or operating balance is negative • Operating balance net of interest expenses is less than 80% of annual debt repayment • Debt servicing costs exceed 110% of operating balance **Expert-assessed:** • Credit history • Debt repayment schedule of the rated entity • Debt portfolio dynamics and structure	Critical	CC and lower

*Assigning a credit rating to the specified category is not conditional upon the criteria shown in the table.
Source: ACRA

In the course of a credit rating assessment, the Agency disregards any extraordinary assistance provided by the federal government, since the latter, as a rule, provides it to regional governments on an ad-hoc basis in case of force majeure. Systematic transfers between budgets (subsidies, subventions, allowances and other transfers) are regulated by the current legislation and are taken into account. That said, when assessing the creditworthiness of lower echelon government bodies (municipalities), ACRA also takes into account the fiscal position and creditworthiness of their higher-ranking government.

Credit rating value assigned to a territorial subject or municipality is capped by the level of the sovereign credit rating. This provision is based on the ability of the federal government to administer the local tax burden, manage cross-border finance and trade flows, allocate tax revenues between different level budgets, and monitor activities of state government-companies and financial institutions. Thus, the highest federal authority represented by the federal government can reallocate fiscal and other monetary flows in its own favor, thereby ensuring a stable fund flow into the federal budget for timely debt servicing and repayment.

On the other hand, credit rating value assigned to a lower echelon regional government (municipality) is not capped by the credit rating value of the territorial subject which the municipality belong to. This provision is based on the factual inequality in economic development levels of various territories within one region and consequent differences in their creditworthiness levels. Given that regional and municipal governments bear all development-related costs within their regions, the Agency allows the possibility of assigning higher credit ratings to municipal authorities than those of federal subjects.

The ACRA Methodology does not stipulate a separate assessment of managerial effectiveness of regional or municipal government. The Agency believes that the quality of budgetary management is directly reflected in the achieved economic development rates and budget indicators. That said, the analysis does take into account such factors as the correlation of the approved budget with its actual execution, as well as the frequency of approved budget revisions and cash shortages. Consistent agreement between the forecasted and actual financial indicators points to the regional government’s accurate budgeting and good forecasting capabilities. At the same time, frequent revisions of the approved budget, with significant amendments to key balance sheet items, serves as an indicator of poor managerial qualities and inadequate budget forecasting capabilities. Regular cash shortages signify a poor budget flow planning, which increases the risk of loan payment delays (including interest payments) and creates risk of frequent use of short-term borrowings.

4 Credit Rating Definition

This chapter of the Methodology describes the principal credit rating factors, the degree with which they may influence the rating of a regional or municipal government body, and its accountability principles when used as part of a territorial subject's credit rating.

4.1. The Institutional Factor

The institutional basis of a regional or municipal government's performance in the overall budget pattern incorporates such factors as its revenue powers and expenditure powers, the degree of its fiscal autonomy, and its ability to attract external financing.

The principal parameter that defines a local self-governing body is its ability to perform the following functions:

- Legislative regulation of budgetary relations, formation and promulgation of laws, ordinances, and local legal acts;
- Taxes and dues rates regulation within its legislative scope;
- Independent budget expenditure allocation;
- Revenue allocation between subordinate budgets;
- Debt financing;
- Providing financial assistance to subordinate budgets;
- Independent management of idle funds;
- Property privatization.

The main parameters of the institutional environment, within which a regional government operates, are stability and predictability. The Agency considers an institutional environment stable and forecastable contingent upon the availability of the following: a legally established set of inter-budgetary rules and regulations, fixed sources of income and established expenditure powers, the rated entity's rights with regards to the use of debt financing, and an easily forecastable revision processes of the all of the above listed factors. This factor combination has a positive effect on the rated entity's creditworthiness, which is reflected in the highest credit rating score. However, any time-serving revisions (including those that serve political purposes) threaten the stability and predictability of an institutional environment, putting pressure on the rated entity's creditworthiness and its total credit rating score.

Any subordinate municipal-level budgets that receive financing from the rated entity's budget shall have a significant effect on the regional government's creditworthiness. The principal rating criteria here are the efficiency of funds use on the part of subordinate budgets, ability to stimulate local economic growth and tax base growth, and to independently generate budget revenues. Subordinate budgets that perform only the technical functions without being actively involved in the local economic development, hamper local economic growth and tax base growth. The Agency regards such factors as having an adverse effect on the rated entity's total credit rating score.

Stability and predictability of an institutional environment are rated based on a legislative framework analysis, the frequency of budget authority revisions, and budget target revisions within a single budget year. The main criteria for stability and predictability are as follows: a transparent mechanism of forming inter-budgetary relations, long-term stability of the rated entity's budget authority, and low frequency of budget target revisions within a single budget year. This last factor is assessed based on the Agency's expert opinion.

4.2. Regional Economy

4.2.1. Specifics and Level of Development

When performing a Methodology-based analysis of a regional economy, the Agency keeps its main focus on the following factors:

- Gross Regional Product (GRP) per capita;
- Growth rates of both the regional economy and its selected sectors benchmarked against the country average;
- Employment / unemployment rates across the region and within its selected industries;
- Local residents' aggregate cash earnings.

One of the key indicators of a territorial subject's economic climate is its GRP per capita, which signals of the residents' material wellbeing as well as the level of development of the regional tax base. A high GRP per capita signifies a well-developed tax base and consequently, an inflow of funds from corporate profit tax revenues, which gives the rated entity much broader cost funding and debt financing possibilities.

The growth rates of the regional GRP and its selected industries benchmarked against the country averages serve as indicators of local economic growth rates. This type of benchmarking not only helps to determine the region's overall performance (high or low) as compared to those of its peer group but also to detect the key sources for its economic growth.

The employment / unemployment rate is also regarded as a valuable parameter that influences a regional government's creditworthiness, since the level of employment affects the amount of local population's taxable earnings. A high unemployment level signals of a lack of economic growth within the region and the latter's inability to increase its budget revenues by tax means. Employment rate also serves as an indicator of budget spending on social services and social security benefits.

Local residents' aggregate cash earnings serve as an auxiliary indicator, which sheds light on one of the rated entity's key budget revenue sources, i.e. individual income tax revenues.

A special focus is kept on the analysis of regional enterprises, namely:

- Profitability of economic sectors and companies;
- Financial stability, including the size of debt load;
- Dynamics of past-due debt owed by the commercial sector;
- Fixed asset depreciation and capital expenditures;
- Percentage of facility utilization.

Financial analysis of a region's primary corporate taxpayers that define and shape the local economy, helps to determine the local economic climate and its future outlook. The main parameters that affect a regional economy's credit rating as a primary budget revenue source, are the profitability of its enterprises, the volume of their fixed capital investments, and their debt load.

Significant gaps in the rate of economic growth, low profitability and lack of financial stability of local enterprises, along with low employment rates, impede a regional government's ability for beefing up its budget with self-generated revenues and make it dependent on higher-level budget transfers. Such a combination of factors has an adverse effect on the total credit rating score.

Analyzing the above-listed factors helps to paint a detailed economic portrait of a region. When benchmarked against the country average, it indicates which place the rated entity occupies within its peer group in terms of economic potential.

4.2.2. Level of Diversification

In order to measure the rated entity's economic risk exposure, the Agency performs an assessment of the local economy's level of diversification in terms of how it is affected by individual industries or enterprises. A regional economy's sensitivity to industrial cycles can affect its budget revenue dynamics, employment rate, and social climate.

The sectoral structure of a regional or municipal economy determines which risks shall affect its government's creditworthiness. Hence, estimating the level of a region's economic diversification is one of key stages within the scope of a credit rating analysis. A predominant sector or enterprise makes the rated entity's budget volatile to the financial standing of this taxpayer group or enterprise. Within such economic patterns, market fluctuations that affect the predominant sector or corporate taxpayer directly influence the rated entity's financial standing while robbing it of any compensating leverage mechanisms.

The presence of a single large taxpayer in one region is seen as a potential threat to the stable inflow of budget revenues, especially if this taxpayer is part of an industry with a distinctly cyclical nature. This economic pattern shall hamper a territorial subject's credit rating regardless of whether the predominant industry is currently cycling upward or downward. By contrast, any efforts directed at making a regional economy more diverse shall have a positive effect on its credit rating.

The diversification scale of a regional economy depends on the share of each industry or enterprise within its GRP structure, size of budget contributions, and local employment rate. It should be kept in mind that the type of predominant industry (such as industrial agriculture or commercial mining) shall also have a limiting effect on a regional government's creditworthiness; however, it can be offset by other credit rating factors (such as good budget discipline and a reasonably-sized debt load).

4.2.3. Social Factors

Social factors that can affect a regional government's credit rating are as follows:

- Local demographic structure;

- Social infrastructure maturity level;
- Urbanization and engineering infrastructure maturity levels.

The local demographic profile serves as an indicator of both the current and potential regional budget load in terms of social benefits it pays out, as well as education and health care expenditures that fall within the local government's principal expenditure powers. In conjunction with the local age and gender composition, the Agency also performs an assessment of the local social infrastructure maturity level and its ability to withstand both the current and forecasted demand. Lack of adequate social infrastructure places an extra spending burden onto a regional budget. In combination with lack of appropriate revenue sources or reserves, this may lead to a structural deficit.

The urbanization level of a territorial subject is defined by the maturity of its engineering infrastructure, including its communal and road infrastructures. The accessibility of engineering infrastructure indicates the level of local economic development and its potential. However, a highly developed engineering infrastructure overburdens the rated entity's budget in terms of communal facility spending.

Due to a great variety of parameters that define the maturity level of a local social environment and infrastructure, this factor is assessed based on an expert opinion that accounts for regional specifics.

Table 3. Economic development and diversification indicators

	Leader in terms of growth	Significantly higher than the country average	Higher than the country average	Country average	Lower than the country average	Significantly lower than the country average	Critical condition
Parameter	**>0,85**	**0,85–0,75**	**0,75–0,65**	**0,65–0,55**	**0,55–0,45**	**0,45–0,35**	**<0,35**
GRP per capita (% of country average)	~120%	~110%	~105%	~100%	~80%	~70%	~55%
Unemployment rate (% of country average)	~80%	~90%	~95%	~100%	~105%	~110%	~120%
Real earnings of local population (% of country average)	~130%	~120%	~110%	~100%	~90%	~80%	~60%
A. Share of individual sector / enterprise in GRP (worst observed case)	X<15%	15%<X<20%	20%<X<25%	25%<X<30%	30%<X<35%	35%<X<40%	X>40%
B. Largest taxpayer' share in budget revenues	X<15%	15%<X<20%	20%<X<25%	25%<X<30%	30%<X<35%	35%<X<40%	X>40%
C. Share of largest sectors / companies in total employment	X<15%	15%<X<20%	20%<X<25%	25%<X<30%	30%<X<35%	35%<X<40%	X>40%
Social factors	Expert opinion						
Bracket	**30–26%**	**25–23%**	**22–20%**	**19–17%**	**16–14%**	**13–11%**	**<10%**

Source: ACRA

4.3. Budget Structure and Budget Discipline

4.3.1. Degree of Self-Sustainability of Local Budget Revenues

The degree of self-sustainability of local budget revenues is mainly understood as the share of own revenue streams in the total budget (in this Methodology, own revenues are defined as aggregated tax and non-tax budget revenues net of non-repayable receipts). These include both tax and non-tax revenue sources, namely:

- Sources that are legally assigned to rated entity's budget;
- Sources based on the local economy;
- Sources whose rates are controlled by the regional government.

Own source-generated revenue streams hinge on the level of local economic development. By driving their local economies, regional governments are capable of facilitating tax base growth and thus boosting their budget revenues. The notion of local budget self-sustainability also includes the local government's ability to regulate current rates of local taxes and dues, in order to boost the economy by increasing budget revenues or reducing the taxpayer burden.

The rated entity, whose own revenue streams make up a substantial share of the local budget, can be assigned a higher credit rating as compared to its peer group, whose budgets are significantly more dependent on higher-level budget transfers. Despite the guaranteed nature of inter-budget transfers, their volume is determined by the rated entity's fiscal capacity, and its financed expenditures are usually those of social character.

When analyzing the degree of self-sustainability of budget revenues, subsidies and subventions from higher level budgets related to the financing of expenditure powers delegated by a supreme government are not taken into account as a downward driving factor for self-sustainability. Additional fiscal means provided for the execution of delegated powers are seen as neutral in terms of the rated entity's overall creditworthiness.

4.3.2. Degree of Control Over Budget Expenditures

Under the degree of control over budget expenditures, the Agency understands the regional government's ability to monitor expenses or cut back on budget spending. This characteristic of the rated entity's budget is primarily determined by the following parameters:

- Budget expenditures that cannot be reduced for legal, social or other reasons;
- Commitment to adjusting expenditures according to index;
- Existing practice of transferring expenditure powers without providing adequate higher-level budget grants.

The substantial volume of expenditures, which cannot be reduced due to legal, social or other limitations, shall hamper a regional government's ability to balance its budget when it cuts back on expenditures. Such circumstances can also drastically limit the rated entity's ability to finance its capex projects and any spending aimed at sustaining local economic growth.

When assessing the degree of control over the rated entity's expenditures, the Agency analyzes its budget expenditure structure from the perspective of wages and social security benefits (functional classification), and also from the perspective of health care, education, and welfare (economic classification). Experience shows that these expenditures are the least susceptible to cutbacks due to social or political reasons. A substantial share of the above-listed expenditures in the rated entity's budget indicates a reduced ability to cut back on spending and poses a threat of a structural deficit.

Commitment to adjusting expenditures (typically those of social nature) according to index limits a regional government's ability to take swift action in response to economic deterioration and leads to reduced internally-generated budget revenues. The ensuing budget deficit does not experience a stimulating effect from budget spending or consequent tax revenue growth.

The regional government's control over its budget expenditures can also be undermined if a higher government authority delegates its expenditure powers but fails to transfer the required revenue sources. Despite the fact that such practices are not stipulated in the current legislation, time gaps may occur between the transfer of expenditure powers and transfer of funds, which may have an adverse effect on the regional budget balance and liquidity.

4.3.3. Degree of Budget Balance

The principal criterion of budget balance is the conformity between mandatory (recurring) expenditures and recurring revenues. Mandatory expenditures are those that sustain government sector functions and the regular rendering of publicly-funded services, and generate transfers to lower-level budgets. Recurring revenues are those coming from taxes and dues, as well as from planned transfers from higher-level budgets.

Net operational income (or operational balance) is in fact idle budget funds net of mandatory expenditures, which are a readily available resource for the following:

- Debt repayment;
- Capital investment financing and economic development program financing;
- Unforeseen expenditures.

Net operational income (or operational balance) determines the maximum permissible size of capex financing when no debt financing is available, and is reserved for unforeseen expenditures. This indicator also signals of the rated entity's ability to repay its debt.

The operational balance level benchmarked against the rated entity's recurring revenues is one of the defining credit rating factors. A high operational balance surplus is instrumental in financing capital expenditures and repaying debt without refinancing, which is an indicator of a high credit rating.

4.3.4. Budget for Economic Development: Capital Expenditures

Capital budget expenditures include investments into state-owned (municipally-owned) assets and other expenditures incurred in the process of constructing, purchasing, expanding, or improving the local infrastructure, buildings and/or structures, and other such expenditures.

The Agency assesses capital budget expenditures in terms of their impact on a region's economic and social development, and in terms of actual reserves set aside to offset budget spending.

Due to regional government specifics, credit rating agencies evaluate capital budget expenditure efficiency differently from the way similar expenditures are evaluated by businesses. The rated entity's capital expenditures cannot have a direct effect on local economic growth while at the same time facilitating the growth of social infrastructure. In such cases, the key indicator is the effect of capital expenditures have on the level of mandatory future expenditures, which may either grow due to the need for supporting the social infrastructure, or drop due to its growing efficiency.

ACRA also considers capital expenditures as a reserve set aside to offset budget spending in cases when budget revenues go down. The potential volume by which spending can be offset is determined by the nature of the projects being financed. Despite the higher chance of a capex reduction than a social service spending reduction, it should be noted that projects may be long-term, and any financial cutbacks with regards to them may pose a technical impossibility.

Local government budget structure and budget discipline assessments are carried out based on the parameters listed in Table 4.

Table 4. Budget discipline and budget control indicators

	High	Sufficient	Moderate	Average	Below average	Low	Critically low
Parameter	**>0,85**	**0,85–0,75**	**0,75–0,65**	**0,65–0,55**	**0,55–0,45**	**0,45–0,35**	**<0,35**
Share of own revenue sources in budget	>80%	80%>X>70%	70%>X>60%	60%>X>50%	50%>X>40%	40%>X>30%	<30%
Share of mandatory expenditures in budget	<55%	55%<X<60%	60%<X<65%	65%<X<70%	70%<X<75%	75%<X<80%	>80%
Operating balance as % of recurring revenues	>35%	35%>X>30%	30%>X>25%	25%>X>20%	20%>X>15%	15%>X>10%	<10%
Share of capital expenditures in total expenditures	>21%	20%>X>18%	17%>X>15%	14%>X>12%	11%>X>9%	8%>X>6%	<5%
Bracket	**30–26%**	**25–23%**	**22–20%**	**19–17%**	**16–14%**	**13–11%**	**<10%**

Source: ACRA

4.4. Debt Load

4.4.1. Debt Portfolio Parameters

The rated entity's debt portfolio analysis is conducted from the perspective of the lending instruments in use and the adopted repayment schedule (debt amounts due in both the current and forecasted time periods).

Bank loans, bond issues, and higher-level budget loans are available lending instruments for covering budget deficits. Based on the analysis of lending instruments that make up the rated entity's debt portfolio, ACRA forms judgement about the possibility of its refinancing and debt restructuring.

Debt repayment schedule and the share of short-term loans in the portfolio are important criteria for assessing overall debt portfolio quality. A large amount of loans due within the same repayment period shall have a negative effect on the credit rating, since they result in a heavier budget burden.

When analyzing a debt portfolio, the Agency factors in its dynamics and growth rate. A sizable growth of a debt portfolio in conjunction with mandatory expenditure financing indicates a working capital deficit.

When comparing revenue and debt indicators in order to assess the adequacy of return as means of debt repayment, one should keep in mind that certain expenditures incurred by the rated entity (social security benefits and government sector wages) have a de facto priority over debt repayment. In case of a deteriorating economy and funding shortages, a regional government is much more likely to revert to refinancing than cut back on certain expenditures and use the surplus funds to reduce its debt load.

4.4.2. Loan Servicing, Repayment Sources, and the Need for Refinancing

The principal source for loan servicing and repayment is the rated entity's operating balance. A negative operating balance is viewed as an extremely adverse indicator in terms of the rated entity's overall creditworthiness. Offsetting an operational balance deficit at the expense of additional borrowings or privatization-generated revenues also speaks of low creditworthiness.

The rated entity's own revenues signify its ability for timely debt servicing. The correlation of interest payments listed as current expenditures and the operating balance indicates an interest-generated budget burden.

Refinancing of the loan principal is not regarded as an unequivocally negative credit rating factor, but it does require an additional analysis of its underlying reasons. The main rationale for refinancing is the net budgetary effect from loan-funded expenditures.

Debt financing facilitates the growth of the regional tax base (via spending used to boost economic growth) and helps to reduce budget spending (due a more efficient government sector or infrastructure), debt refinancing is regarded as permissible as well as neutral or even positive in credit rating terms. Refinancing of the loan principal is also possible as long as debt servicing costs are curtailed.

4.4.3. Reasons for Attracting Financing and Debt Financing Effect

In order to evaluate whether the rated entity's debt load does not exceed its budget capabilities, and whether its debt financing and refinancing are justified, ACRA analyzes the objectives thereof and fiscal effect debt financing has on the local budget.

Evaluation of effect debt financing makes on the credit rating requires to give priority to investment project financing, which ensures incremental growth of the local tax base or reduction of incremental budget losses as a result of borrowed funds application.

In contrast, mandatory expenditure financing by means of borrowed funds that does not result in an increased tax base or reduced expenses is regarded as an unequivocally adverse credit rating factor. Present day accounting methods do not leave an opportunity to determine the objectives of debt financing, since regional governments formally quote those as 'budget deficit financing.'

The economic feasibility of debt financing by the rated entity is evaluated based on analyzing the correlation between external debt financing and capital expenditures. A sizable excess of debt financing over capital expenditures and excessive debt load growth as compared to the growth of capital expenditures signal of funds potentially being rechanneled to non-capex projects, which the Agency regards as an adverse credit rating factor.

Hence, the very use of debt financing and refinancing does not have a clear-cut effect on a credit rating; rather, it is analyzed in terms of their economic effect and investment viability.

4.4.4. Guarantees

When evaluating the size of debt load, in addition to direct indebtedness, ACRA also accounts for issued guarantees and other off-balance sheet liabilities.

Guarantees issued on behalf of the rated entity are accounted for in full when calculating the rated entity's debt load indicators. The key parameter required to include the issued guarantees into the rated entity's loan principal are the chances of guarantee repayment by means of own budget funds. During the evaluation process, the Agency analyzes the terms and purposes of issued guarantees, their economic rationales, and the original borrowers' financial solvency with regards to guaranteed debt. If the rated entity has sufficient resources that allow it to successfully service its guaranteed debt, issued guarantees can be partially or fully excluded from the calculation of the rated entity's debt load. The decision to include guarantees into the formula for calculating debt load parameters is based on ACRA analysts' expert opinion.

4.4.5. Debt of Government Sector Enterprises and Indirect Liabilities

The Agency considers debt obligations of government sector enterprises as indirect debt load, even without any guarantees issued by the rated entity. The amount of debt carried by government sector enterprises shall be taken into account during the calculation of the rated Entity's debt load, as social considerations may force the latter to repay debts of such enterprises in case of their financial standing deteriorates.

It should be noted that debt incurred by government sector enterprises is incorporated into the rated entity's total debt with regard to their financial standing, ability to service and repay debt, and social impact. Therefore, the actual additional amount of debt that may falls under the responsibility of the regional budget shall be determined based on these factors.

A considerable amount of debt incurred by government sector enterprises, coupled with a low level of control on the part of the rated entity over their financial and operating activities, increases the probability of such enterprises covering their liabilities at the expense of the local budget.

Table 5. Debt load factors

	Minimum risk	Low risk	Moderate risk	Medium risk	Heightened risk	Significant risk	High risk
Assessment	**>0,85**	**0,85–0,75**	**0,75–0,65**	**0,65–0,55**	**0,55–0,45**	**0,45–0,35**	**<0,35**
rated entity's debt relative to operating balance	X<50%	50%<X<100 %	100%<X<160 %	160%<X< 220%	220%<X<280%	280%<X<340%	X>340%
Operating balance net of interest expenses to debt repayment during the current year	X>300%	300%>X> 270%	270%>X> 240%	240%>X> 210%	210%>X> 160%	160%>X>110%	X<110%
Debt servicing risk relative to operating balance	X<10%	11%<X<20%	21%<X<30%	31%<X< 50%	51%<X<70%	71%<X<90%	X>90%
Bracket	**20–19%**	**18–17%**	**16–15%**	**14–13%**	**12–11%**	**10–9%**	**<10%**

Source: ACRA

Also, as a conditional debt load indicator of a territorial subject's economy, ACRA examines the dynamics of debt of the rated entity relative to GRP. Although GRP is not a source of debt repayment and is only a reflection of the rated entity's tax base, which in the end forms its operating balance, this indicator is used to evaluate debt burden on a local budget and to perform a comparative analysis of the rated entity within its peer group.

The Agency shall consider the stability of the rated entity's debt dynamics to GRP ratio as a positive factor in debt load analysis. It the dynamics increases, it is viewed as a negative factor.

4.4.6. Credit History

ACRA takes into account the credit history of a rated entity to date, focusing on its failures to fulfill obligations with regards to debt instruments (bonds) or bank loans. Instances when the rated entity had to revert to debt restructuring or requested extraordinary transfers from a higher-level budget to repay or service its debt, are regarded by the Agency as signs of a significant deterioration in the rated entity's creditworthiness and a high probability of a negative credit rating.

4.5. Budget Liquidity

The liquidity factor implies that a regional authority has the necessary funds for a timely implementation of its planned expenditures, as well as for creating resources that may be used for unscheduled payments.

Budget liquidity is characterized by the ability of a regional government to balance incoming and outgoing cash flows and synchronize the accumulation of funds and make payments in line with the budget, including debt obligations.

Available short-term loans (issued by a bank or transferred from a higher-level budget) that allow to cover cash shortages provide the regional budget with an additional liquidity source. The use of short-term borrowings is not regarded as a negative credit rating factor. However, an excessively frequent use of this instrument indicates poor budget planning and accumulating interest, which, of course, is viewed negatively from the credit rating standpoint.

ACRA assesses the frequency of cash shortage incidents that force regional governments to seek short-term financing. If cash shortages occur due to low budget discipline and poor management, or if they are caused by the volatility of budget revenues, the liquidity risk in relation to debt servicing and repayment increases.

Table 6. Budget liquidity characteristics

Characteristic	Liquidity	Assessment
Excessive	The rated entity has sufficient liquidity for making regular deposits and fulfilling all its expenditure commitments on time, including interest payments.	80%<X
High	The Rated entity has sufficient liquidity for making regular deposits and fulfilling all its expenditure commitments, including interest payments. Short-term bank loans are taken out in exceptional cases.	60%<X<80%
Sufficient	The rated entity has sufficient liquidity for fulfilling all its expenditure commitments on time, including interest payments, in some cases resorting to short-term bank loans.	40%<X<60%
Deficit	The rated entity does not have sufficient liquidity for fulfilling all its expenditure commitments, including interest payments, and regularly takes out short-term bank loans.	20%<X<40%
Critical	The rated entity does not have sufficient liquidity for fulfilling all its expenditure commitments, including interest payments, and resorts to short-term bank loans on a permanent basis, with a significant amount of these loans falling into arrears.	X<20%

Source: ACRA

5 Credit Rating Outlook

Calculating financial indicators and coefficients to be used in a rating model, ACRA takes into account not only historical data, but also its own change forecast for these indicators.

When forecasting cash flows and calculating forecast financial ratios, ACRA makes a number of key assumptions, which are used as a subjective internal source of information in credit rating assessment. These assumptions may be based on both ACRA’s own calculations and information received from the rated entity. Credit ratings may be sensitive to changes in these assumptions, including instances when no new factual information on the activities of the rated entity is available. In the course of a credit rating, the ACRA Rating Committee also identifies key rating assumptions and threshold levels of the coefficients, whose breach is likely to lead to credit rating changes.

In accordance with the Procedure for disclosure of credit ratings and other related notifications, the following information is subject to mandatory disclosure in the course of rating action implementation by ACRA:

- List of key rating assumptions used in forecasting;
- List of key indicators and factors, whose change may affect an issuer’s credit rating, as well as the list of threshold levels of these indicators and factors.

Also in the course of forecasting, ACRA may adjust quality indicators if it expects a change in internal or external risk factors that can result in a modification of assessment categories pertaining to one or more quality indicators.

A credit rating outlook reflects ACRA’s opinion about a likely credit rating change within a certain time period (typically, 12 to 18 months).

Changes in a credit rating outlook are typically associated with ACRA’s own projections regarding a possible change of quantitative and qualitative factors along with key internal or external risk factors affecting standalone creditworthiness assessment. On the other hand, credit rating outlook also depends on changes in relationships between the rated entity and higher-level budgets that the Agency expects to take place. Furthermore, when determining the credit rating outlook, the Agency takes into account the operating environment of the region and current economic trends.

Credit rating outlook is not necessarily a precursor to credit rating changes.

6 Credit Ratings of Debt Instruments Issued by Rated Entities

The Agency believes that bond issues by regional and municipal governments have a status of senior unsecured debt. Credit ratings of such debt instruments correspond to the credit rating of the rated entity.

The current budget legislation does not stipulate any collateral for debt obligations of regional or municipal governments. In this regard, the Agency does not make any credit rating corrections with regards to better protection of secured creditors.

If there a guarantee issued by a higher-level budget, credit rating of this debt instrument is augmented to the level of the guaranteeing rated entity.

7 Validation Approach to Methodology in Accordance with Federal Law N 222-FZ

This Methodology provides for validity verifiability of credit ratings assigned on its basis. The relevant approach and procedure are governed by Clauses 6.7.8 and 6.10 of the Regulation on the Methodology Committee of ACRA, approved by the Board of Directors of ACRA.

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